

ABSTRACT

Disclosed is a high strength and low shrinkage polyester yarn, which has tenacity of 7.4 g/d or higher, elongation at break of 19 to 26 %, shrinkage percentage of 2 % or lower, and respective thermal-stress peaks of 3×10^{-2} to 7.5×10^{-2} g/d and 8.0×10^{-2} to 10.5×10^{-2} g/d at temperature ranges of 100 to 140°C and 230 to 240°C, and process for its preparation. The high strength and low shrinkage polyester yarn is advantageous in that it has desirable resistance to external load and excellent dimensional stability, and is very useful as an industrial yarn with uniform shrinkage and excellent dimensional stability during a post-process for application to tarpaulin and truck covers.